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RAW SEQUENCE LISTING

SEQUENCE LISTING

PATENT APPLICATION: US/09/530,209A

TIME: 12:14 C3 D CENTER 1600/2900

Input Set : A:\190337.txt

Output Set: N:\CRF3\04262001\1530209A.raw

## **ENTERED**

	3	(1) GENER	RAL INFORMATION:						
	5	• •	APPLICANT: Inze, Dirk						
	6	( - )	De Veylder Lieven						
	7		De Almeida Janice						
	9	(ii)	TITLE OF INVENTION: A novel mitogenic cyclin and uses thereof						
	11		NUMBER OF SEQUENCES: 4						
C>		•	CORRESPONDENCE ADDRESS:						
•	14	(,	(A) ADDRESSEE: Nixon Peabody LLP						
•	15		(B) STREET: 990 Stewart Avenue						
	16		(C) CITY: Garden City						
	17		(D) STATE: New York, New York						
C>	18		(F) ZIP: 11530						
	20	(V)	COMPUTER READABLE FORM:						
	21	` ,	(A) MEDIUM TYPE: Floppy disk						
	22		(B) COMPUTER: IBM PC compatible						
	23		(C) OPERATING SYSTEM: PC-DOS/MS-DOS						
	(c) SOFTWARE: PatentIn Release #1.0, Version #1.30								
	26	(vi)	CURRENT APPLICATION DATA:						
C>	27		(A) APPLICATION NUMBER: US/09/530,209A						
c>	28		(B) FILING DATE: 13-Jun-2000						
	29		(C) CLASSIFICATION:						
	31	(vii)	PRIOR APPLICATION DATA:						
	32		(A) APPLICATION NUMBER: EP PCT/EP98/06749						
	33		(B) FILING DATE: 23-OCT-1998						
	34		(A) APPLICATION NUMBER: EP 97.203.303.9						
	35		(B) FILING DATE: 24-OCT-1997						
	38	(2) INFOR	MATION FOR SEQ ID NO: 1:						
	40	(i)	SEQUENCE CHARACTERISTICS:						
	41		(A) LENGTH: 927 base pairs						
	42		(B) TYPE: nucleic acid						
	43		(C) STRANDEDNESS: double						
	44		(D) TOPOLOGY: linear						
	46		MOLECULE TYPE: cDNA						
	48		HYPOTHETICAL: NO						
	50	(ix)	FEATURE:						
	51		(A) NAME/KEY: CDS						
	52		(B) LOCATION: 1927						
	54		SEQUENCE DESCRIPTION: SEQ ID NO: 1:	0					
				8					
			lu Glu Asn Leu Glu Leu Ser Leu Cys Thr Glu Ser Asn						
	58	l com can c	5 10 15	6					
			AT GAG GGC ATG ATT GTT GAC GAA ACT CCG ATT GAA ATT TCG 9	υ					
	62	val ASP A	sp Glu Gly Met Ile Val Asp Glu Thr Pro Ile Glu Ile Ser 20 25 30						
		አጥጥ ሮርጥ ሮ	AG ATG GGT TTT TCT CAA TCG GAG AGT GAG GAG ATT ATC ATG 14	1					
			In Met Gly Phe Ser Gln Ser Glu Ser Glu Glu Ile Ile Met	4					
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PATENT APPLICATION: US/09/530,209A

DATE: 04/26/2001 TIME: 12:14:40

Input Set : A:\190337.txt

Output Set: N:\CRF3\04262001\I530209A.raw

66			35					40					4 5				
	GAG	ATG		GAG	AAG	GAG	ΔAC	-	СУТ	ጥጥር	CCA	א כיתי	45	ሮአጥ	m x C	A TO C	100
69	Glu	Met.	Val	Glu	Lvs	Glu	Lvs	Gln	His	T.Ou	Dro	Sor	Acn	Acn	Tur	TIO	192
70		50			-1-		55	02		Leu	110	60	nsp	пор	1 <b>y</b> 1	116	·
72	AAG	AGA	CTT	AGA	AGT	GGA		TTG	GAT	TTG	ААТ		GGA	AGA	AGA	GAT	240
73	Lys	Arg	Leu	Arg	Ser	Gly	Asp	Leu	Asp	Leu	Asn	Val	Glv	Arg	Ara	Asp	240
74	65	_		-		70	-		-		75		1	5	5	80	
76	GCC	CTC	AAT	TGG	ATT	TGG	AAG	GCT	TGT	GAA	GTA	CAC	CAG	TTT	GGA		288
77	Ala	Leu	Asn	Trp	Ile	Trp	Lys	Ala	Cys	Glu	Val	His	Gln	Phe	Gly	Pro	
78					85					90					95		
80	TTG	TGT	TTT	TGC	ATT	GCA	ATG	AAC	TAC	TTG	GAT	CGA	TTC	TTA	TCG	GTT	336
	Leu	Cys	Phe		Leu	Ala	Met	Asn	Tyr	Leu	Asp	Arg	Phe	Leu	Ser	Val	
82				100					105					110			
						GGC											384
	HlS	Asp		Pro	Ser	Gly	Lys		Trp	Ile	Leu	Gln		Leu	Ala	Val	
86	COM	mam	115	<b></b>	mma.			120					125				
						GCA											432
90	ніа	130	Leu	ser	ьеи	Ala		ьуs	шe	GIU	GIU		GLu	Val	Pro	Met	
	ጥጥር		ርአጥ	CTT	CAC	GTT	135	C A TI	ССШ	CAC	mmm	140	mmm	G 3 G	aam		400
						Val											480
	145		пор	пси	0111	150	СТУ	тэр	FIO	GIII	155	vaı	PIIE	GIU	Ата	160	
		GTC	CAA	AGA	ATG	GAG	СТТ	ጥጥG	GTG	TTG		ΔΔΔ	ጥጥር	ΔΔΔ	ጥርር		528
97	Ser	Val	Gln	Arq	Met	Glu	Leu	Leu	Val	Leu	Asn	Lvs	Len	Lvs	Trn	Ara	320
98				_	165					170				, .	175	1119	
100	TTG	AGA	GCA	ATA	ACT	CCA	TGC	TCA	TAC	ATA	AGA	TAT	TTC	CTG		AAG	576
101	Leu	Arg	Ala	Ile	Thr	Pro	Cys	Ser	Tyr	Ile	Arg	Tyr	Phe	Leu	Arg	Lys	
102				180					185					190	_	_	
																TCA	624
		Ser			Asp	Gln	Glu			Asn	Thr	Leu	Ile	Ser	Arg	Ser	
106		~	195					200					205				
108	TTA	CAA	GTG	ATA	GCC	AGC	ACA	ACC	AAA	GGT	ATT	GAC	TTT	TTG	GAG	TTT	672
				тте	Ата	Ser		Thr	Lys	Gly	Tle	Agn	Dho	T 011	~ 1 · ·	Dha	
110	,	210											FIIC	ьеи	GIU	Pne	
	AGA		-m $-$ m	C 3 3	ССШ	a a m	215	0.0m	a			220					
T T J							GCT			GCA	CTT	220 TCT	GTT	тст	GGA	GAA	720
	Arg	Pro				Ala	GCT			GCA	CTT Leu	220 TCT	GTT	тст	GGA	GAA Glu	720
114	Arg 225	Pro	Ser	Glu	Ala	Ala 230	GCT Ala	Ala	Val	GCA Ala	CTT Leu 235	220 TCT Ser	GTT Val	TCT Ser	GGA Gly	GAA Glu 240	
114 116	Arg 225 TTG	Pro CAG	Ser AGA	Glu GTA	Ala CAC	Ala 230 TTT	GCT Ala GAC	Ala	Val TCT	GCA Ala TCC	CTT Leu 235 TTC	220 TCT Ser	GTT Val	TCT Ser	GGA Gly TTC	GAA Glu 240 TCA	720 768
114 116	Arg 225 TTG	Pro CAG	Ser AGA	Glu GTA	Ala CAC His	Ala 230	GCT Ala GAC	Ala	Val TCT	GCA Ala TCC Ser	CTT Leu 235 TTC	220 TCT Ser	GTT Val	TCT Ser	GGA Gly TTC Phe	GAA Glu 240 TCA Ser	
114 116 117 118	Arg 225 TTG Leu	Pro CAG Gln	Ser AGA Arg	Glu GTA Val	Ala CAC His 245	Ala 230 TTT Phe	GCT Ala GAC Asp	Ala AAC Asn	Val TCT Ser	GCA Ala TCC Ser 250	CTT Leu 235 TTC Phe	220 TCT Ser TCT Ser	GTT Val CCT Pro	TCT Ser CTT Leu	GGA Gly TTC Phe 255	GAA Glu 240 TCA Ser	768
114 116 117 118 120	Arg 225 TTG Leu CTA	Pro CAG Gln CTT	Ser AGA Arg CAA	Glu GTA Val AAG	Ala CAC His 245 GAG	Ala 230 TTT Phe	GCT Ala GAC Asp	Ala AAC Asn AAG	Val TCT Ser	GCA Ala TCC Ser 250 ATA	CTT Leu 235 TTC Phe	220 TCT Ser TCT Ser	GTT Val CCT Pro	TCT Ser CTT Leu	GGA Gly TTC Phe 255 GAG	GAA Glu 240 TCA Ser	
114 116 117 118 120	Arg 225 TTG Leu CTA	Pro CAG Gln CTT	Ser AGA Arg CAA	Glu GTA Val AAG	Ala CAC His 245 GAG	Ala 230 TTT Phe	GCT Ala GAC Asp	Ala AAC Asn AAG	Val TCT Ser	GCA Ala TCC Ser 250 ATA	CTT Leu 235 TTC Phe	220 TCT Ser TCT Ser	GTT Val CCT Pro	TCT Ser CTT Leu	GGA Gly TTC Phe 255 GAG	GAA Glu 240 TCA Ser	768
114 116 117 118 120 121 122 124	Arg 225 TTG Leu CTA Leu GAT	CAG Gln CTT Leu	Ser AGA Arg CAA Gln TCA	Glu GTA Val AAG Lys 260 GAC	Ala CAC His 245 GAG Glu	Ala 230 TTT Phe AGA Arg	GCT Ala GAC Asp GTG Val	Ala AAC Asn AAG Lys CAA	TCT Ser AAG Lys 265 ACA	GCA Ala TCC Ser 250 ATA Ile	CTT Leu 235 TTC Phe GGG Gly	220 TCT Ser TCT Ser GAA Glu	GTT Val CCT Pro ATG Met	TCT Ser CTT Leu ATA Ile 270 TTA	GGA Gly TTC Phe 255 GAG Glu	GAA Glu 240 TCA Ser AGT Ser	768
114 116 117 118 120 121 122 124 125	Arg 225 TTG Leu CTA Leu GAT	CAG Gln CTT Leu	Ser AGA Arg CAA Gln TCA	Glu GTA Val AAG Lys 260 GAC	Ala CAC His 245 GAG Glu	Ala 230 TTT Phe	GCT Ala GAC Asp GTG Val	Ala AAC Asn AAG Lys CAA	TCT Ser AAG Lys 265 ACA	GCA Ala TCC Ser 250 ATA Ile	CTT Leu 235 TTC Phe GGG Gly	220 TCT Ser TCT Ser GAA Glu	GTT Val CCT Pro ATG Met	TCT Ser CTT Leu ATA Ile 270 TTA	GGA Gly TTC Phe 255 GAG Glu	GAA Glu 240 TCA Ser AGT Ser	768 816
114 116 117 118 120 121 122 124 125 126	Arg 225 TTG Leu CTA Leu GAT Asp	CAG Gln CTT Leu GGC Gly	Ser AGA Arg CAA Gln TCA Ser 275	Glu GTA Val AAG Lys 260 GAC Asp	CAC His 245 GAG Glu TTA Leu	Ala 230 TTT Phe AGA Arg TGT Cys	GCT Ala GAC Asp GTG Val TCA Ser	Ala AAC Asn AAG Lys CAA Gln 280	TCT Ser AAG Lys 265 ACA Thr	GCA Ala TCC Ser 250 ATA Ile CCC Pro	CTT Leu 235 TTC Phe GGG Gly AAT Asn	TCT Ser TCT Ser GAA Glu GGG Gly	GTT Val CCT Pro ATG Met GTT Val 285	TCT Ser CTT Leu ATA Ile 270 TTA Leu	GGA Gly TTC Phe 255 GAG Glu GAA Glu	GAA Glu 240 TCA Ser AGT Ser GTA Val	768 816
114 116 117 118 120 121 122 124 125 126 128	Arg 225 TTG Leu CTA Leu GAT Asp	CAG Gln CTT Leu GGC Gly	Ser AGA Arg CAA Gln TCA Ser 275 TGT	Glu GTA Val AAG Lys 260 GAC Asp	Ala CAC His 245 GAG Glu TTA Leu TTC	Ala 230 TTT Phe AGA Arg TGT Cys	GCT Ala GAC Asp GTG Val TCA Ser	Ala AAC Asn AAG Lys CAA Gln 280 AAG	TCT Ser AAG Lys 265 ACA Thr	GCA Ala TCC Ser 250 ATA Ile CCC Pro	CTT Leu 235 TTC Phe GGG Gly AAT ASn	TCT Ser TCT Ser GAA Glu GGG Gly	GTT Val CCT Pro ATG Met GTT Val 285	TCT Ser CTT Leu ATA Ile 270 TTA Leu	GGA Gly TTC Phe 255 GAG Glu GAA Glu	GAA Glu 240 TCA Ser AGT Ser GTA Val	768 816
114 116 117 118 120 121 122 124 125 126 128	Arg 225 TTG Leu CTA Leu GAT Asp	CAG Gln CTT Leu GGC Gly GCT Ala	Ser AGA Arg CAA Gln TCA Ser 275 TGT	Glu GTA Val AAG Lys 260 GAC Asp	Ala CAC His 245 GAG Glu TTA Leu TTC	Ala 230 TTT Phe AGA Arg TGT Cys	GCT Ala GAC Asp GTG Val TCA Ser TTT Phe	Ala AAC Asn AAG Lys CAA Gln 280 AAG	TCT Ser AAG Lys 265 ACA Thr	GCA Ala TCC Ser 250 ATA Ile CCC Pro	CTT Leu 235 TTC Phe GGG Gly AAT ASn	TCT Ser GAA Glu GGG Gly TCT Ser	GTT Val CCT Pro ATG Met GTT Val 285	TCT Ser CTT Leu ATA Ile 270 TTA Leu	GGA Gly TTC Phe 255 GAG Glu GAA Glu	GAA Glu 240 TCA Ser AGT Ser GTA Val	768 816 864
114 116 117 118 120 121 122 124 125 126 128	Arg 225 TTG Leu CTA Leu GAT Asp	CAG Gln CTT Leu GGC Gly	Ser AGA Arg CAA Gln TCA Ser 275 TGT	Glu GTA Val AAG Lys 260 GAC Asp	Ala CAC His 245 GAG Glu TTA Leu TTC	Ala 230 TTT Phe AGA Arg TGT Cys	GCT Ala GAC Asp GTG Val TCA Ser	Ala AAC Asn AAG Lys CAA Gln 280 AAG	TCT Ser AAG Lys 265 ACA Thr	GCA Ala TCC Ser 250 ATA Ile CCC Pro	CTT Leu 235 TTC Phe GGG Gly AAT ASn	TCT Ser TCT Ser GAA Glu GGG Gly	GTT Val CCT Pro ATG Met GTT Val 285	TCT Ser CTT Leu ATA Ile 270 TTA Leu	GGA Gly TTC Phe 255 GAG Glu GAA Glu	GAA Glu 240 TCA Ser AGT Ser GTA Val	768 816 864

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Input Set : A:\190337.txt

Output Set: N:\CRF3\04262001\1530209A.raw

```
927
132 ACA CAT CTT TCT TAA
133 Thr His Leu Ser
134 305
137 (2) INFORMATION FOR SEQ ID NO: 2:
         (i) SEQUENCE CHARACTERISTICS:
140
             (A) LENGTH: 308 amino acids
              (B) TYPE: amino acid
141
              (D) TOPOLOGY: linear
142
        (ii) MOLECULE TYPE: protein
144
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
147 Met Ala Glu Glu Asn Leu Glu Leu Ser Leu Leu Cys Thr Glu Ser Asn
                                         10
150 Val Asp Asp Glu Gly Met Ile Val Asp Glu Thr Pro Ile Glu Ile Ser
                                     25
                20
153 Ile Pro Gln Met Gly Phe Ser Gln Ser Glu Ser Glu Glu Ile Ile Met
                                 40
156 Glu Met Val Glu Lys Glu Lys Gln His Leu Pro Ser Asp Asp Tyr Ile
                             55
159 Lys Arg Leu Arg Ser Gly Asp Leu Asp Leu Asn Val Gly Arg Arg Asp
                                             75
162 Ala Leu Asn Trp Ile Trp Lys Ala Cys Glu Val His Gln Phe Gly Pro
                     85
                                         90
165 Leu Cys Phe Cys Leu Ala Met Asn Tyr Leu Asp Arg Phe Leu Ser Val
                                    105
               100
168 His Asp Leu Pro Ser Gly Lys Gly Trp Ile Leu Gln Leu Leu Ala Val
     115
                                120
171 Ala Cys Leu Ser Leu Ala Ala Lys Ile Glu Glu Thr Glu Val Pro Met
       130
                           135
174 Leu Ile Asp Leu Gln Val Gly Asp Pro Gln Phe Val Phe Glu Ala Lys
177 Ser Val Gln Arg Met Glu Leu Leu Val Leu Asn Lys Leu Lys Trp Arg
178
                    165
                                        170
180 Leu Arg Ala Ile Thr Pro Cys Ser Tyr Ile Arg Tyr Phe Leu Arg Lys
               180
                                    185
183 Met Ser Lys Cys Asp Gln Glu Pro Ser Asn Thr Leu Ile Ser Arg Ser
184 195
                                200
186 Leu Gln Val Ile Ala Ser Thr Thr Lys Gly Ile Asp Phe Leu Glu Phe
                            215
189 Arg Pro Ser Glu Ala Ala Ala Ala Val Ala Leu Ser Val Ser Gly Glu
                        230
                                            235
192 Leu Gln Arg Val His Phe Asp Asn Ser Ser Phe Ser Pro Leu Phe Ser
                  245
                                        250
195 Leu Leu Gln Lys Glu Arg Val Lys Lys Ile Gly Glu Met Ile Glu Ser
                                   265
198 Asp Gly Ser Asp Leu Cys Ser Gln Thr Pro Asn Gly Val Leu Glu Val
                               280 .
201 Ser Ala Cys Cys Phe Ser Phe Lys Thr His Asp Ser Ser Ser Tyr
       290
                            295
204 Thr His Leu Ser
```

RAW SEQUENCE LISTING DATE: 04/26/2001 PATENT APPLICATION: US/09/530,209A TIME: 12:14:40

Input Set : A:\190337.txt

Output Set: N:\CRF3\04262001\1530209A.raw

```
205 305
208 (2) INFORMATION FOR SEQ ID NO: 3:
         (i) SEQUENCE CHARACTERISTICS:
              (A) LENGTH: 25 base pairs
211
212
              (B) TYPE: nucleic acid
213
              (C) STRANDEDNESS: single
              (D) TOPOLOGY: linear
214
216
      (ii) MOLECULE TYPE: other nucleic acid
217
              (A) DESCRIPTION: /desc = "oligonucleotide"
219
       (iii) HYPOTHETICAL: YES
       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
221
223 GAACACTCGA GTGTAATGGC AGAGG
                                                                             25
227 (2) INFORMATION FOR SEQ ID NO: 4:
         (i) SEQUENCE CHARACTERISTICS:
230
              (A) LENGTH: 26 base pairs
231
              (B) TYPE: nucleic acid
232
              (C) STRANDEDNESS: single
233
              (D) TOPOLOGY: linear
        (ii) MOLECULE TYPE: other nucleic acid
235
236
              (A) DESCRIPTION: /desc = "oligonucleotide"
238
       (iii) HYPOTHETICAL: YES
240
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
242 CATCATACTA GTTATAATAA TGTAAG
                                                                            26
```

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/530,209A

DATE: 04/26/2001 TIME: 12:14:41

Input Set : A:\190337.txt

Output Set: N:\CRF3\04262001\I530209A.raw

L:13 M:220 C: Keyword misspelled or invalid format, [(iv) CORRESPONDENCE ADDRESS:]

L:18 M:220 C: Keyword misspelled or invalid format, [(F) ZIP:]

L:27 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]

L:28 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]